

**This listing of claims will replace all prior versions
and listings of claims in the application:**

Listing of Claims

1. (Currently Amended) A process for producing a temperature sensitive natural filler-reinforced thermoplastic polymer composition as an article which comprises:

(a) extrusion melt-forming through a die in a first extruder a mixture of a high melting temperature thermoplastic polymer, which has been pre-dried to remove moisture, with a first melting temperature with a metal salt, wherein the salt is present in an amount between about 2.5 and 5 percent by weight of the polymer which reduces the melting temperature of the mixture to a second lower melting temperature to form strands;

(b) pelletizing the first strands to form pellets; and

(c) extruding a mixture of a temperature sensitive natural filler, consisting essentially of cut fibers selected from the group consisting of a plant leaf, seed, stalk and combination thereof, and the pellets in a second extruder, at the second lower melting.

MSU 4.1-617
Appl. No. 10/701,879
Amdt. Dated: February 19, 2007
Reply to Office Action of January 16, 2007

temperature of less than 200°C without degrading the natural filler to form second strands of the natural filler-reinforced thermoplastic polymer composition, wherein without the metal salt, the extrusion with the temperature sensitive filler degrades the temperature sensitive natural filler.

2. (Currently Amended) ~~The process of Claim 1 wherein the filler is a cellulose.~~ The process of Claim 1 wherein the fibers are selected from the group consisting of hemp, flax, kenaf, jute, sisal, pineapple leaf fiber, coir, henequen, corn, cotton, and mixtures thereof.

3. (Cancelled)

4. (Original) The process of Claim 1, 2, or 3 wherein the thermoplastic polymer is selected from the group consisting of nylon, polyethylene terephthalate (PET), polybutylene terephthalate (PBT), polytrimethylterephthalate (PTT), ethylene carbon monoxide (ECM), propylene oxide (PPO), polystyrene copolymer blends, polyacetals, cellulose butyrate, acrylonitrile-butadiene-styrene (ABS), methyl

MSU 4.1-617
Appl. No. 10/701,879
Amdt. Dated: February 19, 2007
Reply to Office Action of January 16, 2007

methacrylates, polychlorotrifluoroethylene polymers, and mixtures thereof.

5. (Original) The process of Claim 1, 2, or 3 wherein the metal in the metal salt forms a reaction product with the polymer in the melt.

6. (Original) The process of Claim 1, 2, or 3 wherein the metal salt is a metal halide.

7. (Original) The process of Claim 1 wherein the thermoplastic polymer composition is molded into a shape.

Claim 8 (Cancelled)

9. (Currently Amended) ~~The process of Claim 1 wherein the filler further comprises a glass or a high melting temperature polymer fiber.~~ The process of Claim 1 wherein a glass or a high melting temperature polymer fiber is introduced with the fibers in step (c).

10. (Currently Amended) A process for producing an article from a temperature sensitive natural fibers-reinforced thermoplastic polymer composition which

MSU 4.1-617
Appl. No. 10/701,879
Amdt. Dated: February 19, 2007
Reply to Office Action of January 16, 2007

comprises:

(a) extrusion melt-forming through a die in a first extruder a mixture of a high melting temperature thermoplastic polymer, which has been pre-dried to remove moisture, with a first melting temperature with at least one metal salt selected from the group consisting of lithium chloride, lithium bromide, lithium iodide, copper chloride, zinc chloride, aluminum chloride, gallium chloride, and mixtures thereof wherein the salt reduces the melting point of the mixture to a second lower melting temperature to form first strands;

(b) pelletizing the first strands ~~from~~ to form second pellets;

(c) extruding a mixture of one or more temperature sensitive natural fibers, consisting essentially of cut fibers selected from the group consisting of a plant leaf, seed, stalk and combination thereof, and the second pellets in a second extruder, at the second lower melting temperature of less than 200°C without degrading the natural fibers to form second strands of the temperature sensitive natural fibers-reinforced thermoplastic polymer composition; and

(d) melt-forming an article from the ~~second~~

~~strands~~ composition of step (c), wherein the extruding and melt forming without the metal salt degrades the temperature sensitive natural fibers.

11. (Currently Amended) The process of Claim 10 wherein the fibers are selected from the group consisting of hemp, flax, kenaf, jute, sisal, pineapple leaf fiber, coir, henequen, ~~pure cellulose in its various forms~~, corn, cotton, and mixtures thereof.

12. (Previously Presented) The process of Claim 10 wherein the fibers-reinforced composition further includes a maleated compatibilizer and one or more toughening agents selected from the group consisting of rubber, modified rubber, maleated rubber, epoxidized rubber, vegetable oil-based plasticizer, and mixtures thereof.

13. (Original) The process of Claim 10, 11, or 12 wherein the thermoplastic polymer is selected from the group consisting of nylon, polyethylene terephthalate (PET), polybutylene terephthalate (PBT), polytrimethylterephthalate (PTT), ethylene carbon

MSU 4.1-617
Appl. No. 10/701,879
Amdt. Dated: February 19, 2007
Reply to Office Action of January 16, 2007

monoxide (ECM), propylene oxide (PPO), polystyrene copolymer blends, polyacetals, cellulose butyrate, acrylonitrile-butadiene-styrene (ABS), methyl methacrylates, polychlorotrifluoroethylene polymers, and mixtures thereof.

14. (Original) The process of Claim 10, 11, or 12 wherein the metal in the metal salt forms a reaction product with the thermoplastic polymer in the melt.

15. (Previously Presented) The process of Claim 10 wherein the fibers-reinforced thermoplastic polymer composition is molded into a shape.

Claim 16 (Cancelled)

17. (Previously Presented) The process of Claim 10 wherein a glass or a high melting temperature polymer fiber is introduced with the fibers in step (c).

18. (Currently Amended) A process for producing a temperature sensitive natural filler-reinforced

thermoplastic polymer composition as an article which comprises:

(a) extrusion melt-forming through a die in a first extruder a mixture of a thermoplastic polymer, which has been pre-dried to remove moisture, with a melting temperature at about 200° C or above with at least one metal salt, wherein the salt is present in an amount between about 2.5 and 5 percent by weight of the polymer which reduces the melting temperature of the mixture to less than about 200° C to form strands;

(b) pelletizing the strands to form pellets;
and

(c) extruding a mixture of the temperature sensitive natural filler, consisting essentially of cut fibers selected from the group consisting of a plant leaf, seed, stalk and combination thereof, and the pellets in a second extruder, at less than 200° C without degrading the temperature sensitive natural filler to form second strands of the natural filler-reinforced thermoplastic polymer composition, wherein without the metal salt, the extrusion with the temperature sensitive filler degrades the temperature sensitive natural filler.

19. (Original) The process of Claim 18 wherein the thermoplastic polymer is selected from the group consisting of nylon, polyethylene terephthalate (PET), polybutylene terephthalate (PBT), polytrimethylterephthalate (PTT), ethylene carbon monoxide (ECM), propylene oxide (PPO), polystyrene copolymer blends, polyacetals, cellulose butyrate, acrylonitrile-butadiene-styrene (ABS), methyl methacrylates, polychlorotrifluoroethylene polymers, and mixtures thereof.

20. (Currently Amended) The process of Claim 18 wherein the filler is selected from the group consisting of hemp, flax, kenaf, jute, sisal, pineapple leaf fiber, coir, henequen, ~~pure cellulose in its various forms~~, corn, cotton, and mixtures thereof.

21. (Previously Presented) The process of Claim 18 wherein the metal salt is selected from the group consisting of lithium chloride, lithium bromide, lithium iodide, copper chloride, zinc chloride, aluminum chloride, gallium chloride, and mixtures thereof.

MSU 4.1-617
Appl. No. 10/701,879
Amdt. Dated: February 19, 2007
Reply to Office Action of January 16, 2007

22. (Previously Presented) The process of Claim 18 wherein the filler further includes a glass or a high melting temperature polymer fiber.

Claims 23-29 (Cancelled)